

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
23 December 2004 (23.12.2004)

PCT

(10) International Publication Number
WO 2004/111266 A1

(51) International Patent Classification⁷: C12Q 1/68

(21) International Application Number:
PCT/AU2004/000722

(22) International Filing Date: 31 May 2004 (31.05.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2003903034 17 June 2003 (17.06.2003) AU
2003903039 17 June 2003 (17.06.2003) AU

(71) Applicant (*for US only*): HUMAN GENETIC SIGNATURES PTY LTD [AU/AU]; 63 Kananook Avenue, Bayview, NSW 2104 (AU).

(72) Inventor; and

(75) Inventor/Applicant (*for US only*): MILLAR, Douglas, Spencer [AU/AU]; 8 Rowland Street, Revesby, NSW 2212 (AU).

(74) Agent: ALLENS ARTHUR ROBINSON PATENT & TRADE MARKS ATTORNEYS; The Chifley Tower, 2 Chifley Square, Sydney, NSW 2000 (AU).

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHODS FOR GENOME AMPLIFICATION

(57) Abstract: A method for whole genome amplification comprising (a) treating genomic DNA with a modifying agent which modifies cytosine bases but does not modify 5'-methyl-cytosine bases under conditions to form single stranded modified DNA; (b) providing a population of random X-mers of exonuclease-resistant primers capable of binding to at least one strand of the modified DNA, wherein X is an integer 3 or greater; (c) providing polymerase capable of amplifying double stranded DNA, together with nucleotides and optionally any suitable buffers or diluents to the modified DNA; and (d) allowing the polymerase to amplify the modified DNA.



WO 2004/111266 A1